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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/625,252	07/25/2000	Jean M. McManus	Bell-33	7622

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EXAMINER	
CHOUDHARY, ANITA	

ART UNIT	PAPER NUMBER
2153	

DATE MAILED: 12/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/625,252	MCMANUS, JEAN M.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Anita Choudhary	2153	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

The amendment filed on August 19, 2004 has been entered. Claims 1, 8, 12, 19, 20, 24, and 26-28 have been amended and are presented for further examination. New claims 30-35 are added.

Claims 1-35 are presented.

### ***Response to Arguments***

Applicant's arguments filed August 19, 2004 have been fully considered but they are not persuasive.

Applicant argues that the reference shown by Locklear Jr. et al (US 6,483,870) does not shows the features described in claims 1, 12, and 20, specifically, forwarding data for establishing a session or data prior to establishing of a session over only a selected link and not over any non-selected links. On page 12 of Remarks entered August 19, 2004, Applicant points out that Locklear patent adds or removes modems with respect to established sessions no when establishing a connection or session where one does not exist. Examiner respectfully disagrees with this assertion.

The Locklear patent shows a session being established on a link between a LAN device (12) and a server (16) where one does not exist. The process commences when a terminal (20) send a signal to initiate a session to the device (12). After accepting the signal to initiate a session the device determines that the signal is in fact for establishing a new session and thus sends a request for service to a server (16) over all identified available twisted pair lines (22) (col. 5 lines 1-7). However, at this point a session connection has not been selected and the

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procedure wherein the device (12) sends a request over one or more twisted pair lines simply facilitates a contact to the server (16), and is not directly used to assign a link for establishing a session. The server (16) responds to the request from the device (12) by selecting one of the at least two communication links (selecting a modem from modem pool) in order to assign the selected modem and associated twisted pair line to a session. Therefore, it is the server (16) that selects one of the communications line to establish a session and not the signal sent by the device (12) over all identified available twisted pair lines (col. 5 lines 25-29). The link is established at the point where server communicates an acknowledgement to the device (12) (col. 5 lines 29-31). The distinction is important to recognize because the Locklear patent shows the claimed limitation of selecting, assigning and forwarding on one of at least two communication links and not selecting, assigning or forwarding over a non-selected communication link.

Furthermore, when device (12) realizes a new session is being requested by a terminal (20), the device (12) consults a table (200) in order to identify one or more twisted pair lines that are available to communicate with the server. By way or example, as shown in figure 4, modem 4 and its associated twisted pair would be the only line identified to be available to communicate with server (16) because all other modems are occupied in other sessions independent from the new session being requested (col. 5 lines 1-7, col. 8 lines 25-38). It is also important to recognize that although a plurality of twisted pair links can be selected, the Locklear patent also shows only one link being selected for a session.

In referring to claims 8, 19, and 24, Locklear shows a database maintaining loading, threshold, operating, line, program, and session information. Any of the information at the database (74) can be used as a function for selecting a communications link (col. 7 lines 17-29).

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In referring to claim 26-28, Locklear shows that before a session is established controller 72 and database 74 can be used to select the best communications link for a newly requested session in order to prevent data looping before the session begins (col. 7 lines 17-29).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 12, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Locklear, Jr. et al. (Us 6,483,870).

Locklear shows a communication system including a communication device (12) coupled to a LAN (18) wherein the device (12) supports sessions between LAN terminal unit (20) and communications server (16) through one of a plurality of communications links (22). Locklear shows:

- Accepting data on the local area network (68, col. 5 line 1-2, col. 6 lines 44-52);
- Determining whether the data accepted concerns establishing a connection or is part of an established connection (col. 5 lines 1-5 and 53-67),
- If it is determined that the data accepted concerns establishing a connection (col. 5 lines 1-5), then:

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- Selecting one of the at least two communication links based on policy (col. 6 lines 53-59),
- Assigning the selected one of the at least two communication links to a session to be associated with the data accepted (col. 5 lines 25-29, col. 6 lines 59-63); and
- Forwarding the data accepted (session request) to only the selected one of the at least two communication links and not to any non-selected ones of the at least two communications links (22, col. 5 lines 31-37, col. 7 lines 3-12, note that the server (16) selects a modem from its modem pool and sends request on only the link associated with the chosen modem and not on any other link); and
- If it is determined that the data accepted is part of an established connection, then forwarding the data accepted to the assigned communication link (fig. 4, 86, col. 9 lines 55-67).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2-11, 13-19, and 21-25 is rejected under 35 U.S.C. 103(a) as being unpatentable Locklear, Jr. et al. (Us 6,483,870) in view of Mamakos (RFC 2526: "A Method for Transmitting PPP Over Ethernet").

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Although Locklear shows substantial features of the claimed invention, it does not explicitly point out details of PPPoE. Nonetheless PPPoE is well known method of transmitting multi-protocol packets over a point-to-point link.

In an analogous art, Mamakos shows a method for sending PPPoE frames (section 4). Given the standard protocol of PPPoE a person of ordinary skill in the art would have realized the advantages of modifying the system shown by Locklear to employ PPPoE in order to connect multiple hosts to a remote site in a cost effective manner (see Mamakos section 1 Introduction).

In referring to claim 3, Mamakos shows the act of determining whether connection is new or an established connection is based on Ether-type field of the PPPoE frame (section 3, section 4 Payloads, ETHER\_TYPE, see also Locklear col. 6 lines 24-35).

In referring to claim 4, Mamakos shows PPPoE discovery initiation packet is for establishing a connection (sec. 5 Discovery Stage, sec. 5.1 PADI).

In referring to claim 5, Mamakos shows a packet selected from a group of packets consisting of a PADO packet (section 5.2), and PADR packet (section 5.3), PADS packet and a session stage packet (section 5.4).

In referring to claim 6 and 17, Mamakos shows in establishing a connection storing the selected on of the at least two communications links and an associated session ID (section 4, payloads- session ID).

In referring to claim 7, Mamakos shows in establishing a connection, storing a terminal ID.

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In referring to claim 8, 19, and 24, Locklear shows policy wherein communication link is selected from a group of function consisting of traffic, past selection states, terminal source of accepted data, user, time present states (fig. 4 and col. 8 lines 25-38 and col. 7 lines 17-29).

In referring to claim 9, Mamakos shows determining that data is part of an established connection and that the data is a request to terminate the connection, then freeing the communication link (sec. 5.5 PADT).

In referring to claim 10, Mamakos shows freeing the selected one of the at least two communications links and permitting the stored selected one of the at least two communications links and the associated session ID to be over written (Mamakos section 5.5, see also Locklear col. 5 line 57-61).

In referring to claim 11, Locklear shows connection is a connection (22) to a session server (16) (fig. 1).

In referring to claim 13, Mamakos shows receiving session offer (PADO packet), forwarding the session offer towards the terminal which requested the session (section 5.2).

In referring to claim 14, Mamakos shows receiving a session acceptance (PADR) from the at least one terminal, forwarding the session acceptance to the assigned one of the at least two communication links (section 5.3).

In referring to claim 15, Mamakos shows receiving data associated with session identification and forwarding the data to the selected communication link (sec. 6).

In referring to claim 18, Locklear shows forwarding session request to a communication link (22), and forwarding the session request and the assigned communications link to a line forwarding process (communication server 16) (col. 7 lines 28-34).



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And forwarding the session request from the line forwarding process to the assigned communication link (col. 7 line 28-30).

In referring to claim 21, Mamakos shows a link termination unit, each link termination units terminating an associated one of the communication links (sec. 5.5 PADT).

In referring to claim 22 and 29, Locklear shows each link termination units as a DSL terminating unit-remote (col. 1 lines 52-58).

In referring to claim 23, Locklear shows storage device for storing policies used for selecting one of the communication links to select (fig. 2, item 74).

In referring to claim 25, Locklear shows a means for managing the policies stored in the storage device (fig. 2 76-86).

In referring to claim 26-28 Locklear shows data looping in the system, before session establishment is prevented (via session tables which select the most appropriate modem connection to handle session requests, col. 9 lines 55-67 and col. 7 lines 17-29).

In referring to claim 30-35, Locklear shows that data looping is in the system caused by session establishment, is prevented because the data accepted, including PPPoE active Discover Offer packets are forwarded to only the selected one of the at least two communications links and not to any non-selected ones of the at lest two communication links (col. 5 lines 25-37, col. 7 lines 17-29, and col. 9 lines 55-67).

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anita Choudhary whose telephone number is (703) 305-5268. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anita Choudhary  
November 19, 2004

  
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